WHAT IS CLAIMED IS:

1. A combustion method for NO_x reduction by suppressing temperature of combustion gas derived from a burner, comprising:

a NO_x reduction step for suppressing combustion gas temperature in such a manner that suppression of NO_x generation is preferred to reduction of exhaust CO value, thereby keeping NO_x value not more than a specified value; and

a CO reduction step for thereafter reducing exhaust CO value resulting from the NO_x reduction step to not more than a specified value.

2. A combustion method for NO_x reduction as claimed in claims 1, wherein the NO_x reduction step is performed with an excess air ratio which is determined from a NO_x reduction target value and an excess air ratio versus NO_x characteristic of the NO_x reduction step.

3. A combustion method for NO_x reduction as claimed in claims 1, wherein the CO reduction step is performed with a CO oxidation catalyst member.

4. A combustion method for NO_x reduction by suppressing temperature of combustion gas derived from a burner, comprising:

a NO_x reduction step for suppressing combustion gas temperature in such a manner that suppression of NO_x

generation is preferred to reduction of exhaust CO value, thereby keeping NO_x value not more than 10 ppm (at 0% O_2 in the exhaust gas, dry basis); and

a CO reduction step for thereafter reducing exhaust CO value resulting from the NO_x reduction step to not more than a specified value.

5. A combustion method for NO_x reduction as claimed in claims 4, wherein the NO_x reduction step is performed with an excess air ratio which is determined from a NO_x reduction target value and an excess air ratio versus NO_x characteristic of the NO_x reduction step.

6. A combustion method for NO_x reduction as claimed in claims 4, wherein the CO reduction step is performed with a CO oxidation catalyst member.

7. A combustion method for NO_x reduction by suppressing temperature of combustion gas derived from a burner, comprising:

a NO_x reduction step for suppressing combustion gas temperature in such a manner that suppression of NO_x generation is preferred to reduction of exhaust CO value, thereby keeping NO_x value not more than a specified value; and

a CO reduction step for thereafter reducing exhaust CO value resulting from the NO_x reduction step to not more than a specified value, the CO reduction step

being performed in a zone where the combustion gas temperature is not more than 900° C.

8. A combustion method for NO_x reduction as claimed in claims 7, wherein the NO_x reduction step is performed with an excess air ratio which is determined from a NO_x reduction target value and an excess air ratio versus NO_x characteristic of the NO_x reduction step.

9. A combustion method for NO_x reduction as claimed in claims 7, wherein the CO reduction step is performed with a CO oxidation catalyst member.

10. A combustion apparatus for NO_x reduction by suppressing temperature of combustion gas derived from a burner, comprising:

NO_x reduction means for suppressing combustion gas temperature in such a manner that suppression of NO_x generation is preferred to reduction of exhaust CO value, thereby keeping NO_x value not more than a specified value; and

CO reduction means for reducing exhaust CO value resulting from the NO_x reduction means to not more than a specified value.

11. A combustion apparatus for NO_x reduction as claimed in 10, wherein the NO_x reduction is performed with an excess air ratio which is determined from a NO_x

reduction target value and an excess air ratio versus NO_x characteristic of the NO_x reduction means.

12. A combustion apparatus for NO_x reduction as claimed in claims 10, wherein the CO reduction means is a CO oxidation catalyst member.

13. A combustion apparatus for NO_x reduction as claimed in claims 10, wherein the NO_x reduction means is implemented by heat transfer tubes having a space formed by removing heat transfer tubes.

14. A combustion apparatus for NO_x reduction as claimed in Claims 10, wherein the NO_x reduction means is implemented by heat transfer tubes having no space formed by removing heat transfer tubes.

15. A combustion apparatus for NO_x reduction by suppressing temperature of combustion gas derived from a burner, comprising:

NO_x reduction means for suppressing combustion gas temperature in such a manner that suppression of NO_x generation is preferred to reduction of exhaust CO value, thereby keeping NO_x value not more than 10 ppm (at 0% O_2 in the exhaust gas, dry basis); and

CO reduction means for reducing exhaust CO value resulting from the NO_x reduction means to not more than a specified value.

16. A combustion apparatus for NO_x reduction by suppressing temperature of combustion gas derived from a burner, comprising:

NO_x reduction means for suppressing combustion gas temperature in such a manner that suppression of NO_x generation is preferred to reduction of exhaust CO value, thereby keeping NO_x value not more than a specified value; and

CO reduction means for reducing exhaust CO value resulting from the NO_x reduction means to not more than a specified value in a zone where the combustion gas temperature is not more than 900° C.